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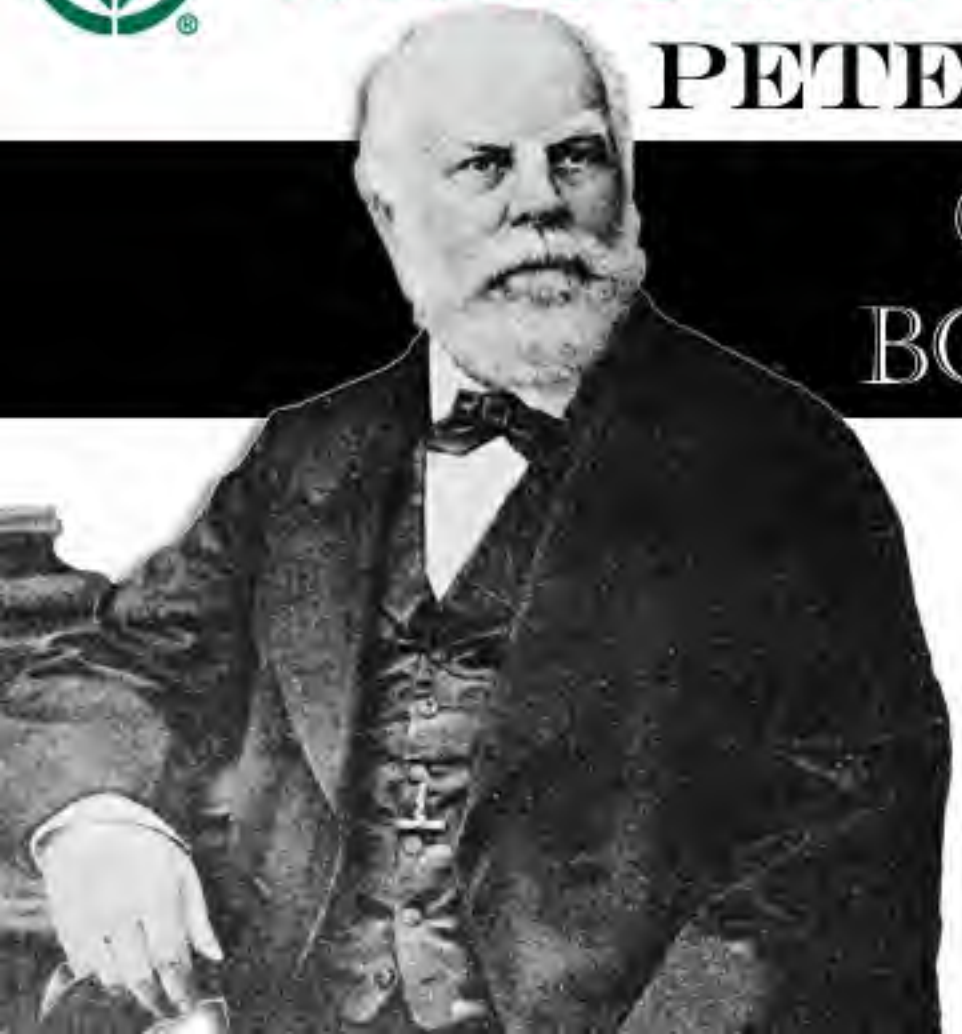
Peter H. Raven Library

George Engelmann Botanical Notebooks



Pagination Note:
Since many of the items lack a specific page number, the page number displayed online refers to the sequentially created number each item was given upon cataloging the materials.

Abies concolor Lindl. ex Gordon Pin. 155 (1858)

I get no trace of a publication by Lindley of Abies concolor, beyond the citation by Gordon as a synonym without reference. It was published by Gordon in his "Pinetum", p. 155, (1858) — not in the "Supplement." Here is all he says.

"No. 11. Picea concolor, —, the Concolor Silver Fir. Lawd

Syn. Pinus concolor, Engelmann.
" Abies concolor, Lindley.

Leaves, long, linear, flat, and much resembling those of Picea grandis, but with both faces of the leaves of the same color. Cones, cylindrical. Scales, Reflexed.

A tall tree, found in the mountains of New Mexico by Engelmann, of which nothing further is known."

Lindley's name, like yours own, was probably never published.

Yours Very Truly
Bruce Watson

a little altered in ed 2. (1875) p. 216

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

1300HA

1300HB

Rec? Apr 13
Ans ___ 14

Cambridge, Apr. 8 [1]/2

Dear Dr. Engelmann,

I enclose Dorr's description of his Pinus Taeda-
culata, from Linn. Trans., 1807,
in full. Also Gordon's figure from
Journ. Hort. Soc., 1849, the description
which accompanied it being repeated
with additions in his Pinetum,
1858.

The volume of Duhamel containing

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Abies concolor July 5 1865

Fremont 2d Exped. — no specimen or letter marked by Torrey; Not spec?

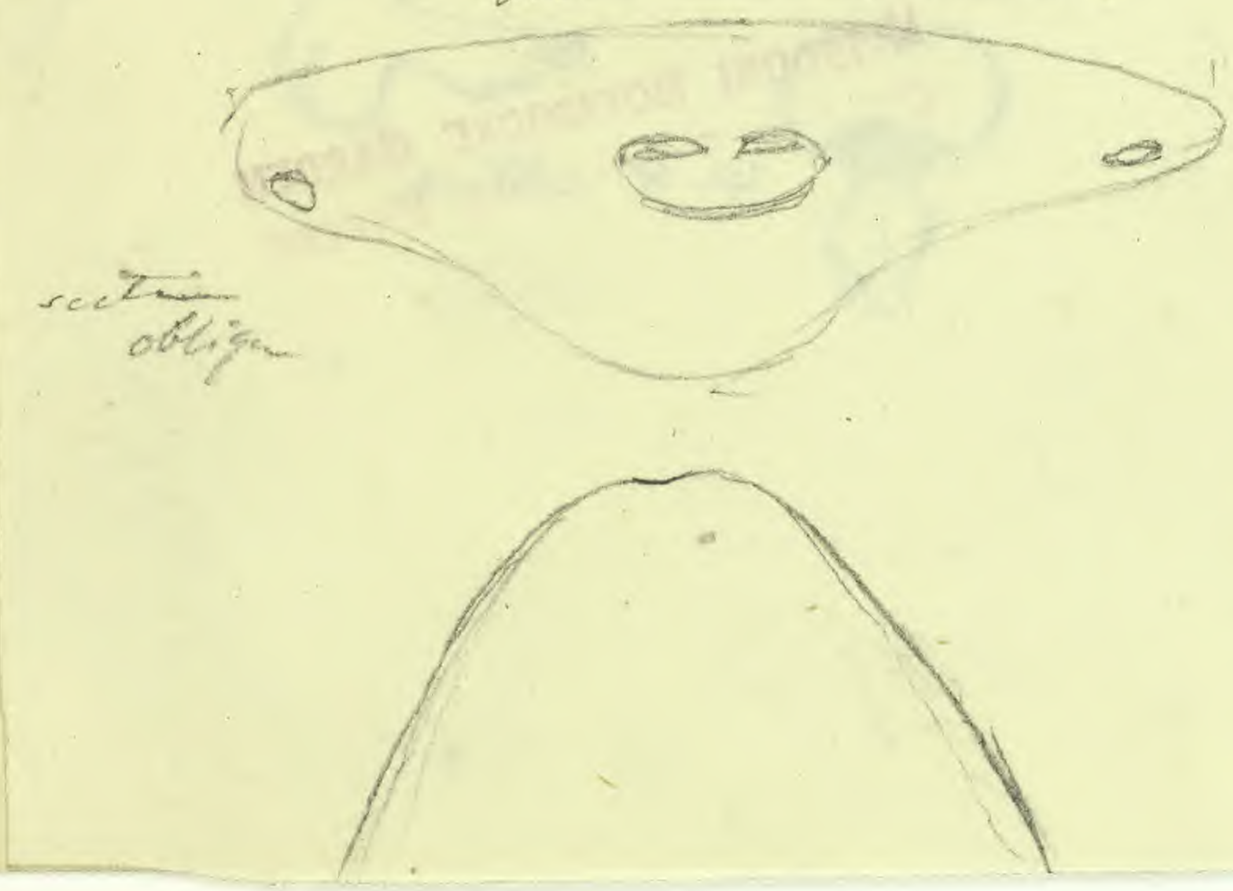
×4

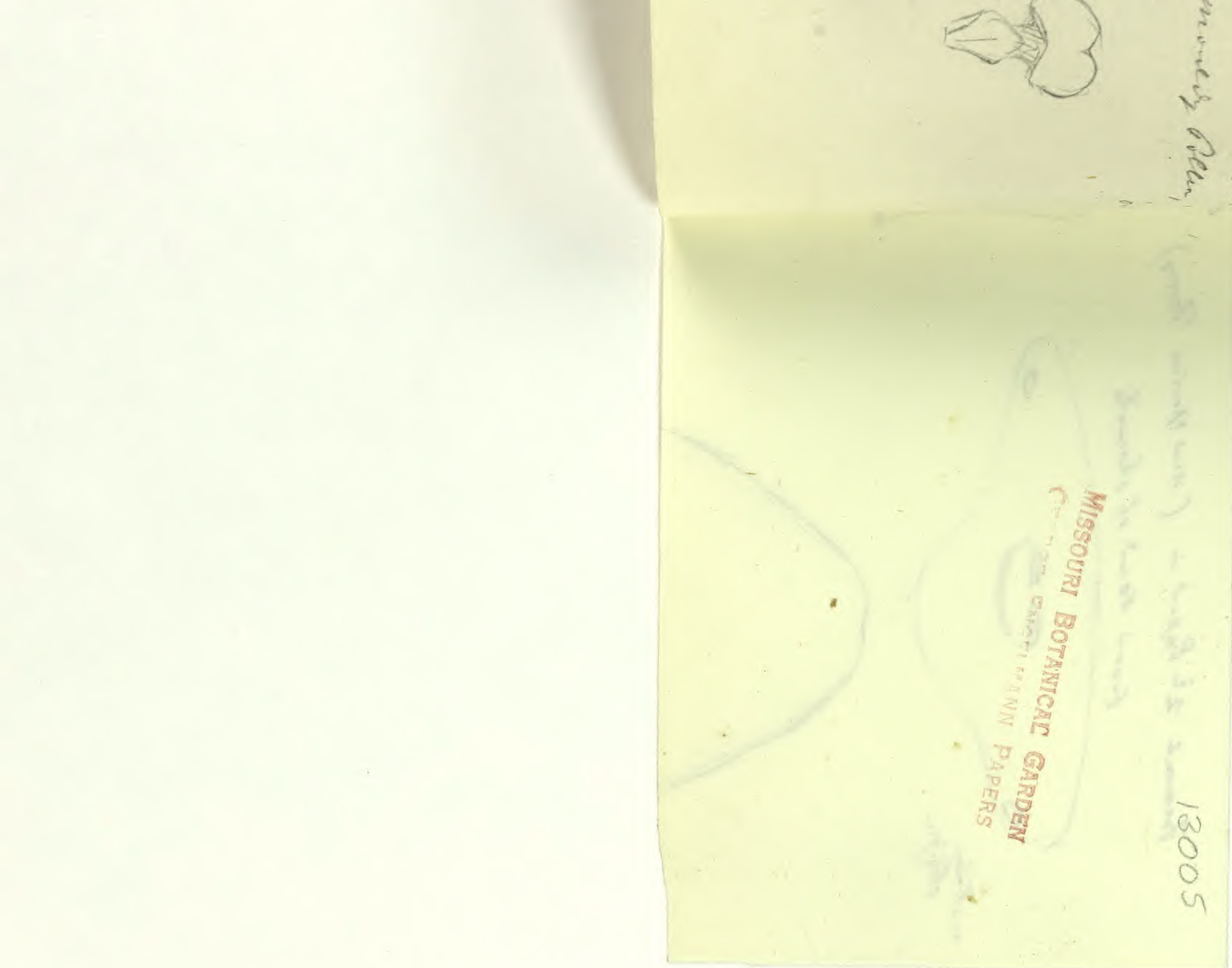
Diam. of Pollen ×415

Oct 6 1875

Fremont 2d Exped — (no specimen Torrey)

broad band of stomata

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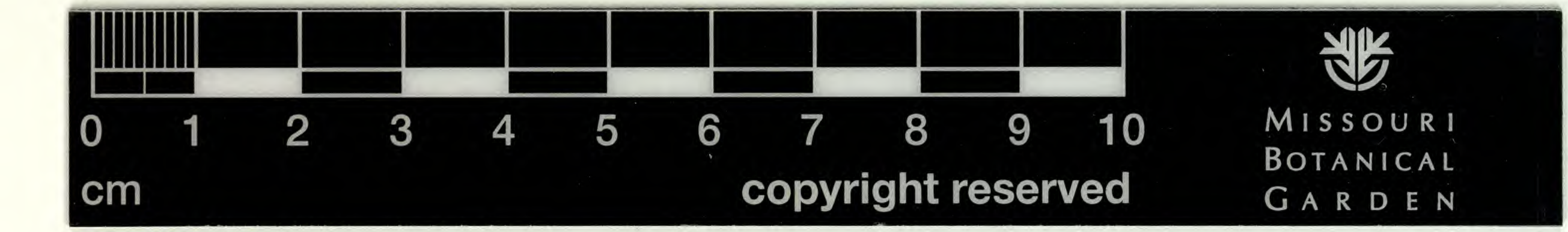
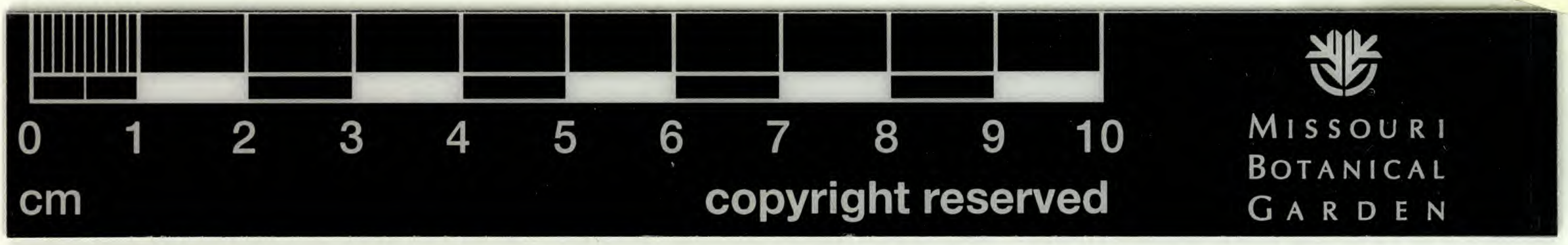


Abies concolor July 8 1865 —

Fresno Co. 2d Exped. — no number or letter
marked by Torrey; Not spec?

Diam. of Pollen × 415 —
= 0.054 – 0.057 M.
1875
OW mostly Pollen, adhering
Gum
0.10 – 0.12

anther × 10



ALEX. LEITCH.

APOTHECARY & PHARMACEUTIST,

Marble Building Cor. Fourth & Olive Sts. St. Louis, Mo.

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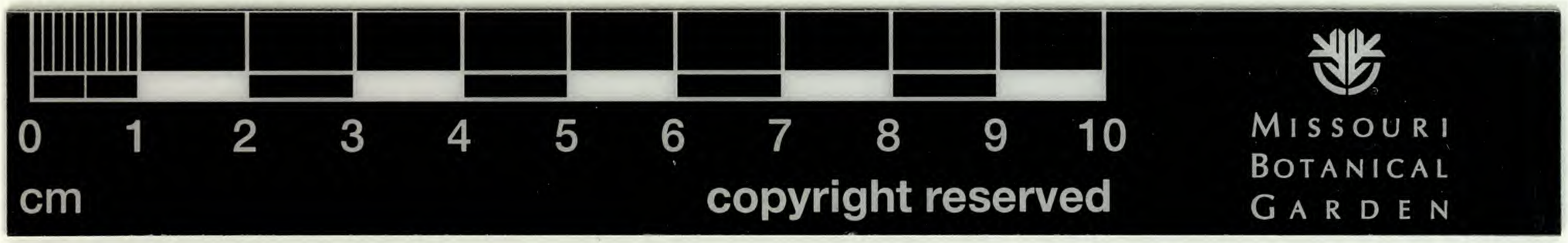
T. S. Brandegee Nov 27 1874:

Abies concolor 60-70 feet high; trees up to 30 feet high have a smooth bark, older ones, 40-50' high have a rough bark 20 feet up; the oldest are rough to the top; 6500' alt.

at the lower end of a Cañon near water; Oak Creek Cañon, with Pin. ponderosa and Abies Douglasii; cones filling to pieces about Octob 1st.

A concolor with short broad stout leaves 8500' alt.

Another at Rosita, 9500 feet alt, has longest leaves,



taken by said Sasaxe &c

being opened as aforesaid.

Given under my hand, at the City of St. Louis, this 2

of Jan A. D., 187/

R. E. Allison

LAND CO

ATTEST:

Fred. W. Fuchs

CITY REGISTER.

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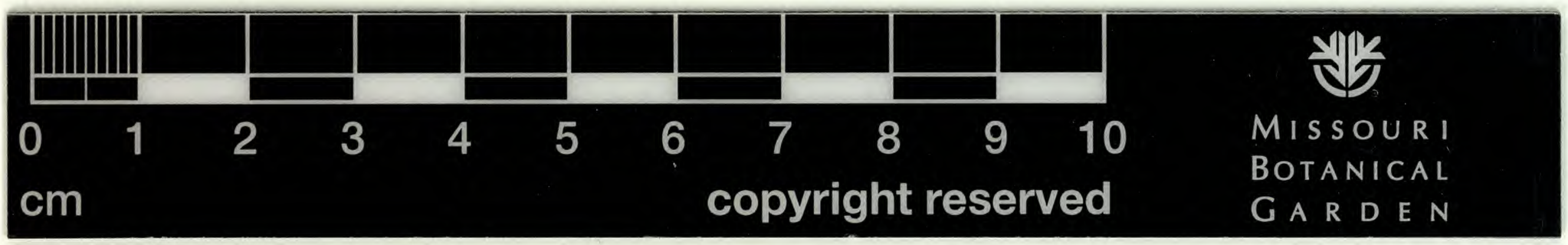

Nov 7th or 10th 1876

J. G. Lemmon

Memoranda — Continued

Louisiana

Abies grandis (or concolor.)

Trees	rings	cones, br.	bushels on tree	dia.	length.
No 1	90	2.		1ft. 11 in	85 ft
2	85	4		1 . 6 .	94 "
3	94	3	half a bushel	1 , 10	82 "
4	112	3		1 . 5	90 "
5	92	2		2 . 2 .	102 "
6	118	3		2 " 6	97 "
7	142	6		3 " 2	108 "
8	154	7		3 " 7 . .	160 "
9	187	6		3 " 10	125 "
10	223	2		4 " 4	142 "
11	208	3		3 " 9	128 "

Bark gray

3 — 4 inches long

Leaves yellowish green above

For centennial specimens I selected a small characteristic tree (specimens in box.) near my home in Sierra valley. Alt. 5,300 ft. East slope Sierra. (Location as in A. amabilis.)

Height	Circuit at base	dia.	age.
110 ft.	10 ft. 4 in	3 ft. 0 in	137.

The tree proved to be more crop-grained and shaky than average, but could not take time to get another.

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I had the twigs of all the Abies carefully noted as to where gathered and how situated on the trees. But in the various handlings lately the slippery things got so mixed that I could not rely upon my notes.

I hope this will not be regretted by you — as it I regret it,

I must never allow myself to over-work so again, As time proves I see less and less need of this excessive toil — so far as the Centennial collection is concerned,

The great R. R. corporation have collected easily, strength their doves a fine large display which they will put in proper order and of course, will get on the ground in due time.

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I believe mine is the only individual collection from this entire Sierras, and hard work it has been for the little reward

3003

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"Abies grandis"

Octo 4 1875

Hort Kew

broad band of stomata

x 20.

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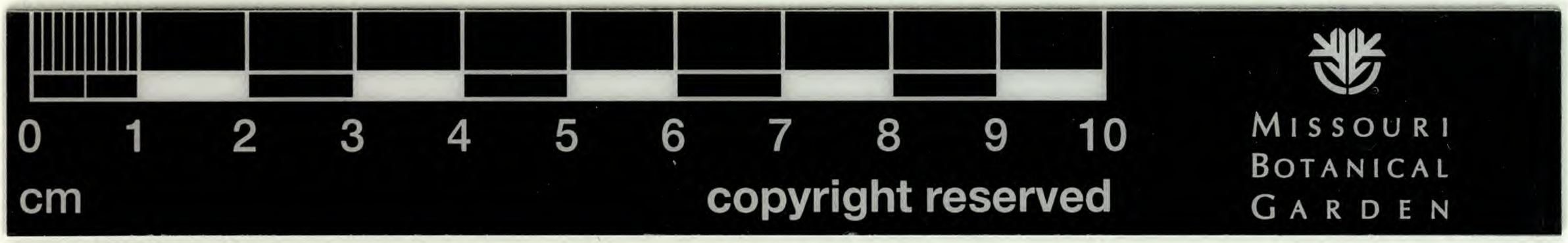
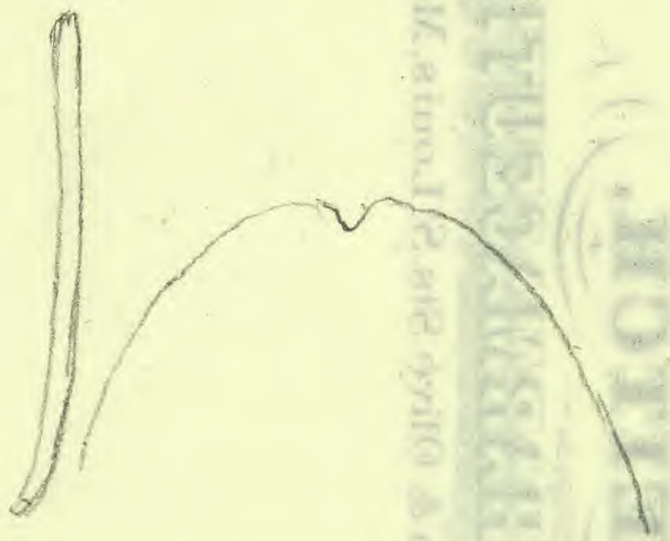


"Abies grandis"

Oct 6 3' 1875

Bolander et Clarke Ranch ± Mt Shasta
1866

scattered stomata
± groove



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ALEX. LEITCH,

APOTHECARY & CHEMIST.

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the burning of the coal is the logical *antecedent* or motor of all the active operations of the mill; that the *special mode* of operation is due to the the form. Though flour could not be made without the appropriate grain, to be sure, yet, to say that the *grain* is the "reciprocal" or "specific stimulus" to call into active operation the flour-producing "agency" of the mill, is *scarcely* identical with my views.

This claim of identity instituted by Mr. HINTON appears so farcically absurd that serious argument would seem inappropriate. To adapt myself to the occasion, therefore, I will even resort to parody, in order to point out the *difference* in the most glaring light. If one were to attempt to explain the phenomena of the clock in the same mystical manner, he would say: The downward movement of the weights is essentially a part of clock movement. It is the *transit* of the time keeping influence from the weights which *causes* the weights descent. It is the *transit* of the same time keeping influence to the clock which gives to that clock its time keeping property. But it is *during*, and alone during such transit, that conjointly the two keep time. *Abandoned* by the time keeping influence, the elements of the raised weights, *now unfettered by opposing forces*, become amenable to inert matter's laws—in a word, become inert; and this it is which *constitutes* their downward movement. *Controlled* by the same time keeping influence, the elements of the clock assume time indicating relations; in a word, become possessed of and adapted for imparting the time of the day; and this it is which constitutes it a time keeping instrument—this is what gives it time keeping properties. But

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distinct and opposite processes, of necessity, concerned in producing the phenomena of active life; [are, of necessity, in operation for the production of what we imply when we say of a thing "it lives;"] and thus, too, tt becomes apparent how death is essentially a part of life, [how "in the midst of life we are in death."]—Page 45.

The *truth* of the doctrines contained in the above quotation is not under discussion. How, "behind the peculiar phraseology," Mr. HINTON made out to find an "identity of thought" with the doctrines which both he and I "took endless pleasure in applying to all the details of vital phenomena," "I do not know."

But let us see what Dr. FREKE himself really meant: after a carefu study of his whole work, I may say, to gather his true meaning, so far as relates to the point at issue, it seems scarcely necessary to go outside of the above quotation, especially that part of it contained in brackets.

1st. He assumes an "organizing influence" or "agency," and, as such, capable of "*transit*," as heat, from a hot body. He makes his organizing agency antagonize chemical force.* The *abandonment* of this "organizing influence," and thus the surrender of organic matter to chemical forces, "constitutes its death." Thus decay or decomposition is the logical *consequence* of this "abandonment" or transit of the "organizing agency."

2d. He makes this "organizing influence" or "agency" a special "creation."

Each organizing atom is, we conceive, compound, that is, composed of a (it may be an inconceivably minute) combination of several distinct matter, to which combination, at the *atom's creation*, organizing agency to constitute it an organizing atom. —Page 26.

If such be a correct representation of the process of organization, the period during which life can be manifested by organized beings must, generation after generation, be gradually becoming shorter and shorter, until at last organized beings shall cease to exist. For we have seen that the organizing agency, as it is being propagated from parent to offspring, is gradually sustaining a diminution in its degree of concentration; a portion thereof only of that which was possessed by the parent being transmitted by that parent to its offspring or type.—Page 26.

The arrangement in the relative positions of those constituents is, as we have seen, essentially distinct from that which their own specific attributes as inanimate matter would bring about; while it was, as we have endeavored to show, the organizing influence *originally conferred at its creation upon that atom's first parent*, and at length, through succeeding generations, propagated to it, which constitutes this distinction in the arrangement of its components.—Page 38.

3d. He makes the appropriate food or nutritive material for each organism, the "reciprocal" or "specific stimulus" for "calling into active operation" the "organizing agency":

We called attention, when observing on the general forces which give motion to inanimate matter, to the necessity we conceived there to exist for the operation of what we called that matter's reciprocal or stimulus, before the action of such forces could be manifested. Our object in so doing was to point to a similar necessity, which we regard as existing,

*See page 22: "To that great power whlch during the struggle of vital activity, antagonizes with chemical force, we would apply the term, organizing agency."

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for the operation of an analogous reciprocal or stimulus, before the action of the analogous general force, the organizing influence, can manifest its active operation.—Page 35.

If, then, this law of reciprocity or of specific stimulation be universally applicable to all operative forces, we should expect to find each organism constructed for conferring organization; that is, each link in the chain of our organizing atoms must be provided with some distinct specific stimulus, which is capable of calling into operation its functional action. In other words, before any organizing atom can confer its organizing agency upon matter, that atom must be exposed to the influence of its own specific stimulus, so that for each link in the great chain of progressively advancing organizing atoms, we must look for an appropriate stimulus; constituting, collectively, a corresponding chain of progressively advancing excitants or specific stimulants.—Page 37.

The first link in the chain of stimulants is mineral matter. . . . The last link in the chain of stimulants is some highly elaborated organized product, which may arouse that atom to the discharge of its functional operation—some highly organized structure upon which the last atom can *confer* an increased organization.—Page 41.

"Behind the peculiar phraseology" in this, is meant: In a flour mill, wheat is the "reciprocal" or specific stimulus to call into "active operation" the *flour producing* "agency" or "influence," and thus the coal under the boiler, "unfettered by opposing forces, becomes amenable to

sequently it [illegible] to burn, or is converted

Orth.

A. lowiana

folia supra stomatibus destituta.

~~Fraser Rivers, Jeffrey, 893~~ ~~" A. lasiocarpa~~ " A. amabilis"

~~Calif. Hort. Edinb. 1869~~ " A. lasiocarpa"

~~Clarke, Bank's Island, Boland. 1866~~

folia supra stomatosa

~~Fremont A. 1846~~

fig Mt. Shasta Jeffreys 1422

fig Hort. Andreae 1869 " A. amabilis "

fig " " " " A. lasiocarpa"

fig " Kew " " A. grandis"

fig ~~Fremont 1846 A.~~ blaps

" Calif. San Francisco (A. Lasiocarpa Hook.)

— Duffields Ranch, Oregon. 1854 Boland.

fig A. Clarkii Boland. 1866.

" Dropmore cult. " A. lasiocarpa" 1869

" " " " Pin. lasiocarpa " 1869

fig ? Palmer, Como only

fig ? Veitch ~~Hb. Hort. Kew~~ A. amabilis Jeffrey

St. Louis, 187
R

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Ernest Fasold,

PHARMACEUTIST,

N. W. Cor. Park Ave. & 10th (or South) St.,

ST. LOUIS.

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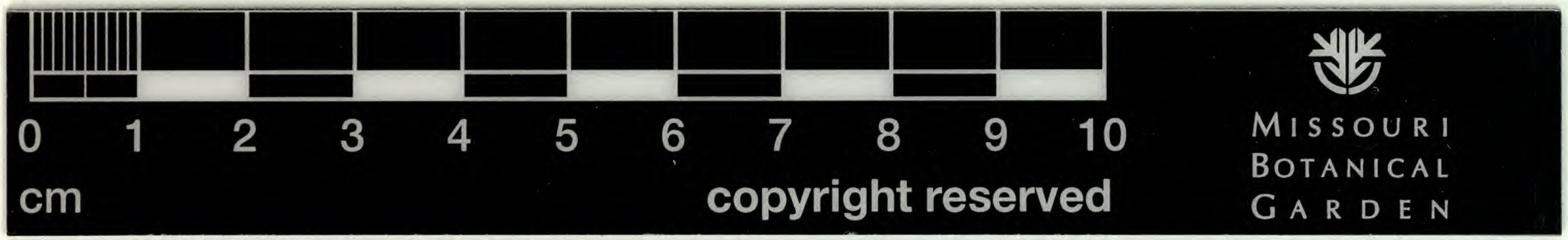
A. Lowiana Gordon — Apl 20 1872

leaves long, grooved on upper side, at least in lower half (upper thin plane or slightly convex) notched on entire ~~[illegible]~~ nearly tapering towards tip, rarely equally broad to rounded tip. — Stomata usually abundant on upper side.

A. "lasiocarpa", Belfour, Jeffrey "393	Rolander & Clarke	line length	tip	stomate on upper side		
A. "Lowiana"	H.B. Edinburg 1869	30	notched	none	24-30	IN
	Fremont A. 1846	21	" blunt	sparing		
A. "amabilis"	Hort. Bonn. Andreae 1869	34	"	copious		
A. "lasiocarpa"	" " "	30	" or entire tapering	"	18-34	IN
	~~Fremont 1845. 202~~	21	entire	"		
	~~Fremont 1845 211~~	11	"	"		
		30	" Tapering	"		
A. Lowiana	Murray; figure					
	1422 Jeffrey, Shasta	18	notched	"		



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Lemcke & Buechner
DRUGGISTS
Druggist, Fifth Avenue and Grand Street
South-West Corner Fifth Avenue and Grand Street

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Why not magnifica?
matter Lowiana?

"Abies amabilis"

Sept 5 1870

Mus. Kew 1269 from Messrs Veitch

scales scarcely turned up

scales without pedicel
width 44 : 22 mm
= 4 : 2

seed 12-13. mm long 6-7 wide
triangular
nearly twice as long as wide

exterior valve large, oblique
covering the greater part of
seed, only the inner upper
point exposed, and a
narrow ventral strip
inner valve also wider than allied

×2

Cone 6 inches long
2 3/4 diameter

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Abies religiosa July 1 1874

anthers red Dr Gregg Mexico 1849

I II ×280

only 3 Pollen grains seen $\frac{39.5 - 36.5}{280}$ mm

= 0.12 – 0.13 mm

= Longest diameter

anthers red. Uhde in Herb reg Berlin

I III

Pollen immature $\frac{38.5 - 40.5}{280}$ = 0.13 – 0.14 mm

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R. C. HARRISON,

508 Leffingwell Avenue,

Druggist & Apothecary

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13015
28 / 1865 / 0.12 - 0.13
28 / 28

July 8 1865—

Abies

Oct 4 1875

Abies

Foemoral A

broad band of stomata

×30

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J. McKittrick & Co. 56 N. Main St.

JONES & LETTS
Gymnastic
Cor. Fifth & Market Sts. St. Louis

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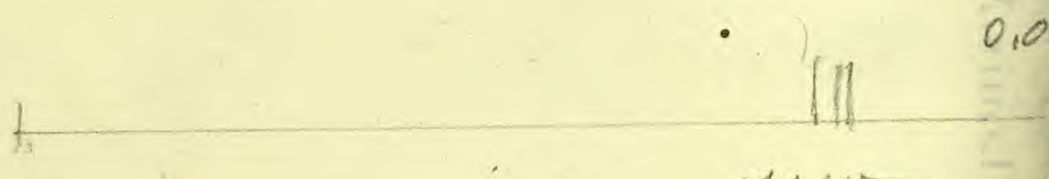
July 8 1865

Abies

A. Fraseri Engl. branches pubescent

anther × 10

dehiscent



0.055 – 0.

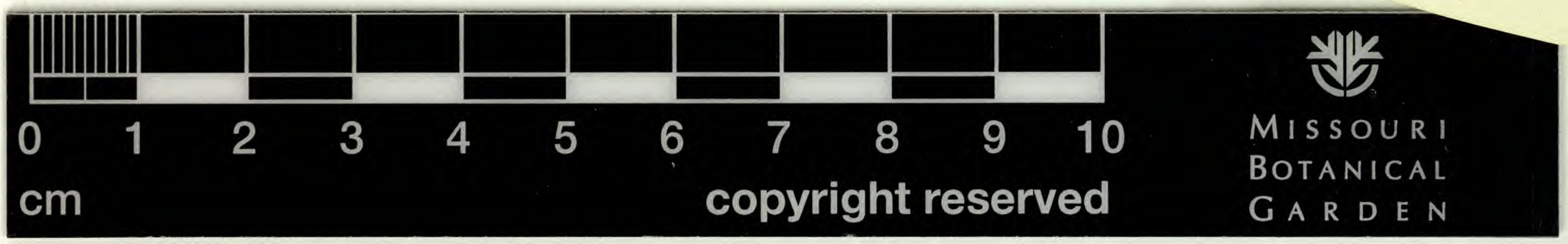
size of Pollen from ripe anther, not fully ma

× 415

0.10 – 0.12 mm

1875

GARDEN PAPERS



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April 20 1872

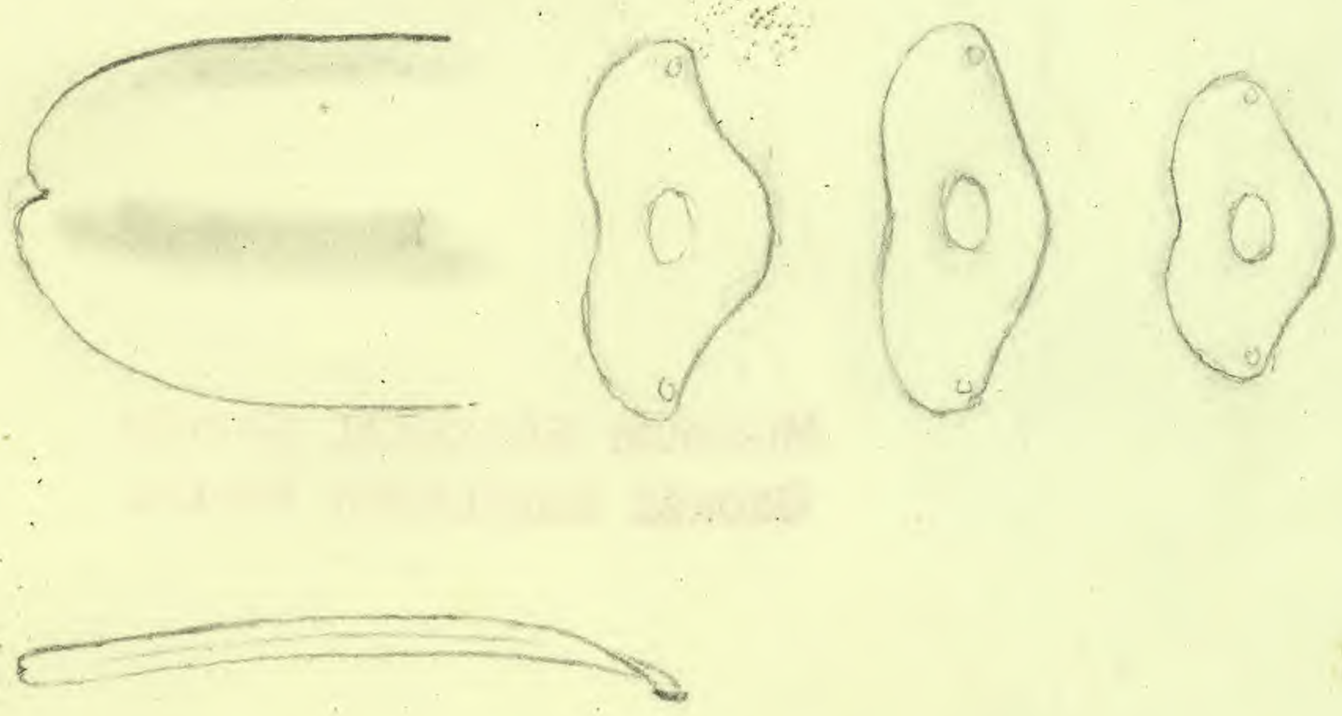
ex Hb Torrey

Collected on Col. Fremont's Expedition

Fremont A 1846

Utah

X10



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Leitch & Corlies

DRUGGISTS

South-west Corner Fifth and Market Streets

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Abies bracteata Hook Bot Mag 4740
Oct 1. 1853

— — Nuttall Sylv. t. 113 1849
1852

sub nom Taxodium - Lemaireanum? Hook. Ic. 379
(as comm) 1841

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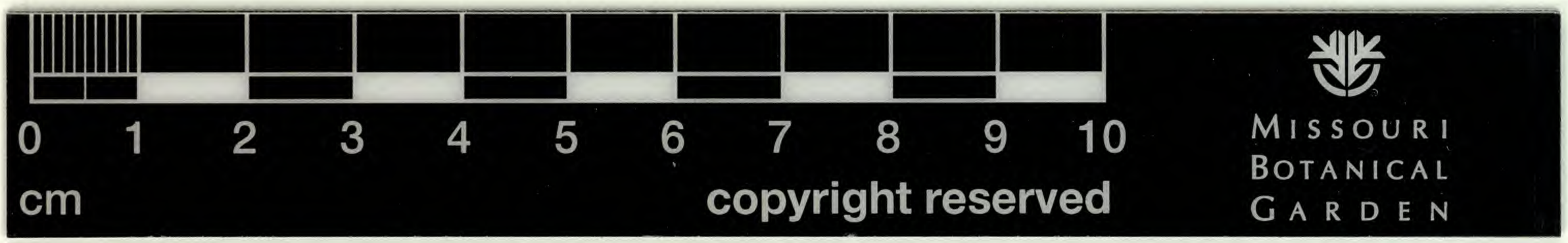

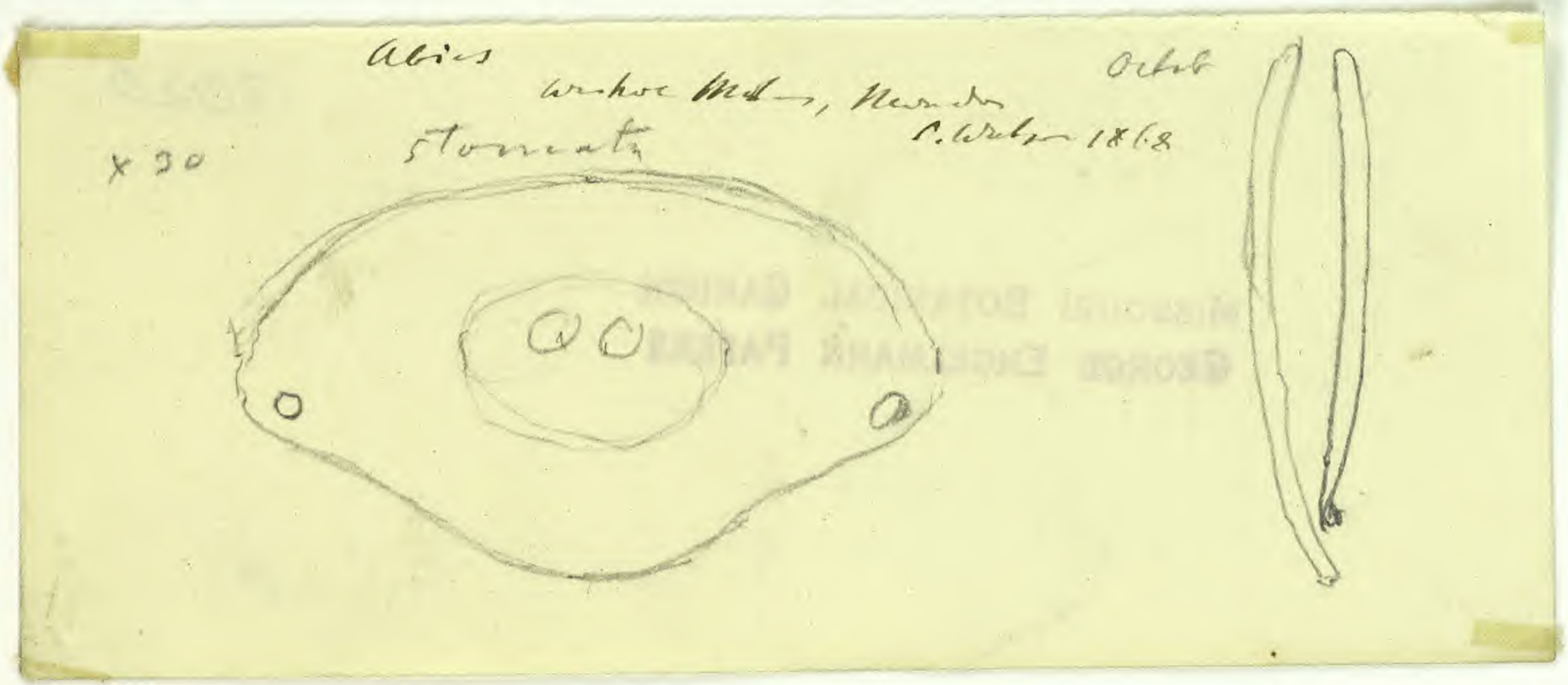

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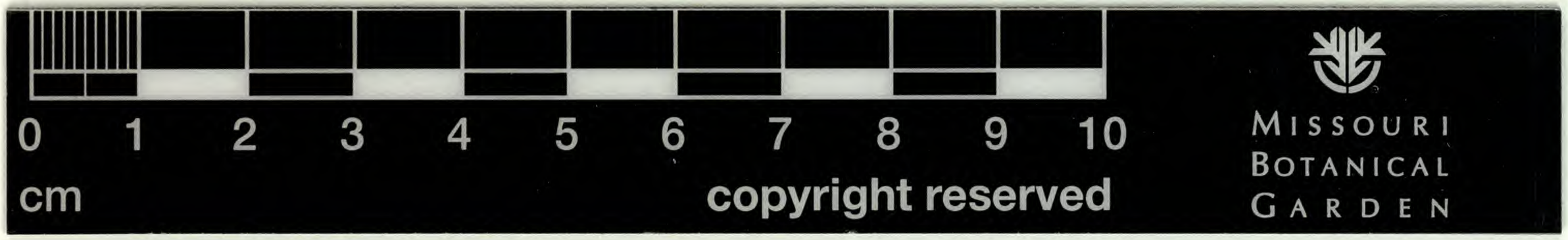
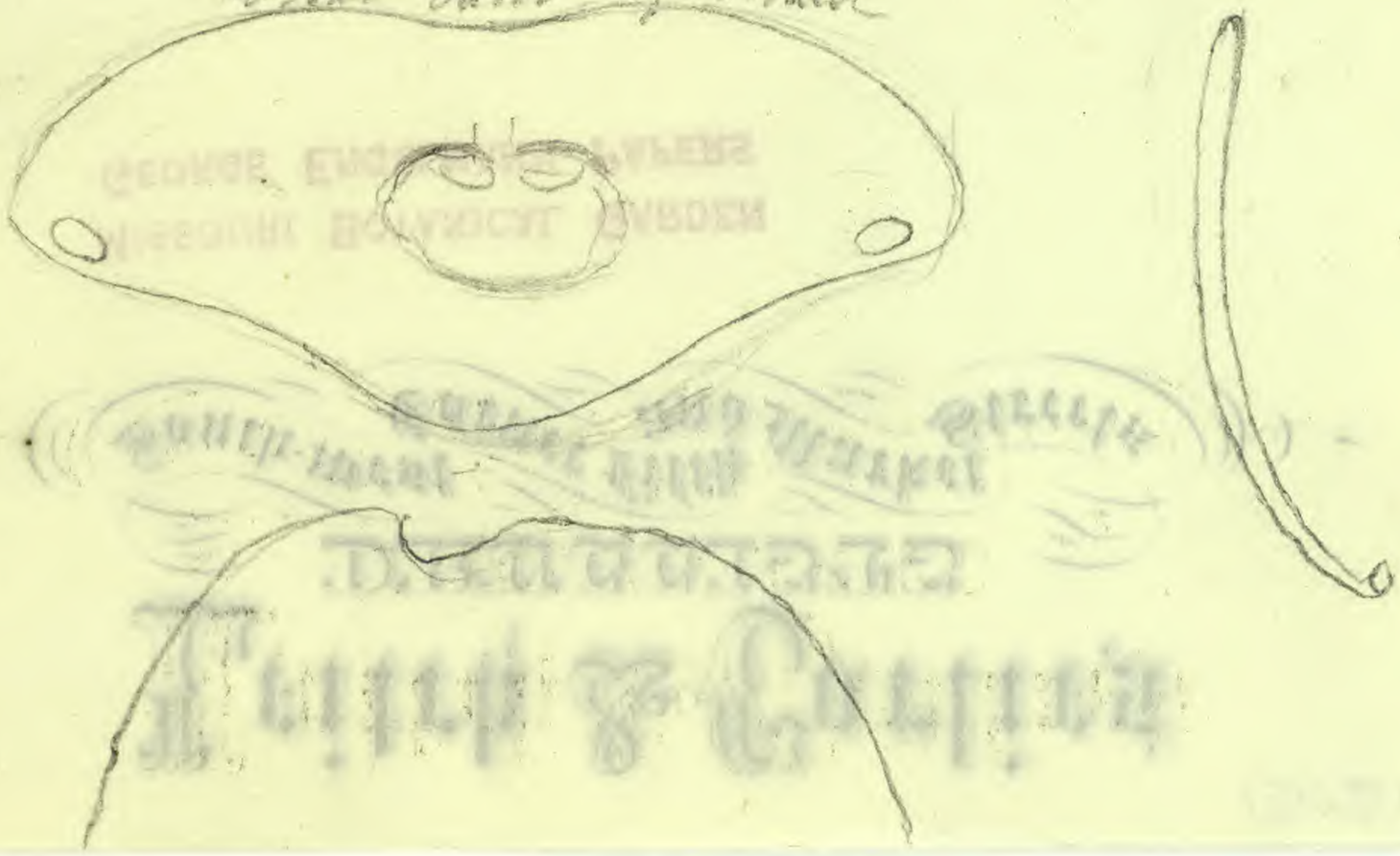


Octo 4 1875

Henry Engelmann Uintah Mountains

broad band of Steel



× 30

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Missouri Botanical Garden
George Engelmann Papers

South-west Corner Fifth and Market Streets

Smith & Portiers

DRUGGISTS

1303